AMPLIFY

Pulmonary Perils and Pearls In Urgent Care

Yancy Phillips, MD, MACP
Chief Clinical Officer
Winding Lane Management

Angela Odom,
Lead Advance Practice Clinician
Saint Joseph/Candler Urgent Care Centers

Pulmonary Perils and Pearls

Yancy Phillips, MD, MACP

Chief Clinical Officer

Winding Lane Management

Financial Disclosure: None

Pulmonary Perils and Pearls

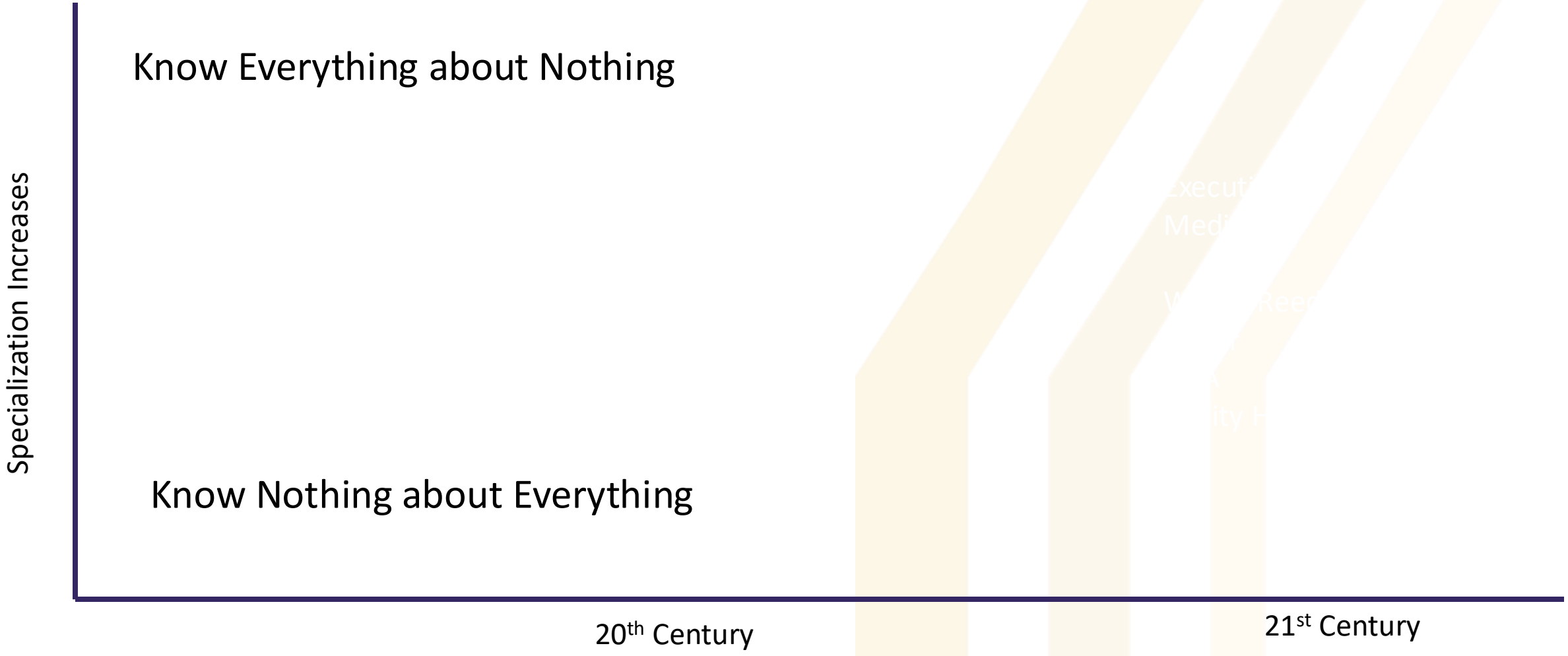
Angela Odom, FNP-C

Lead Advance Practice Clinician

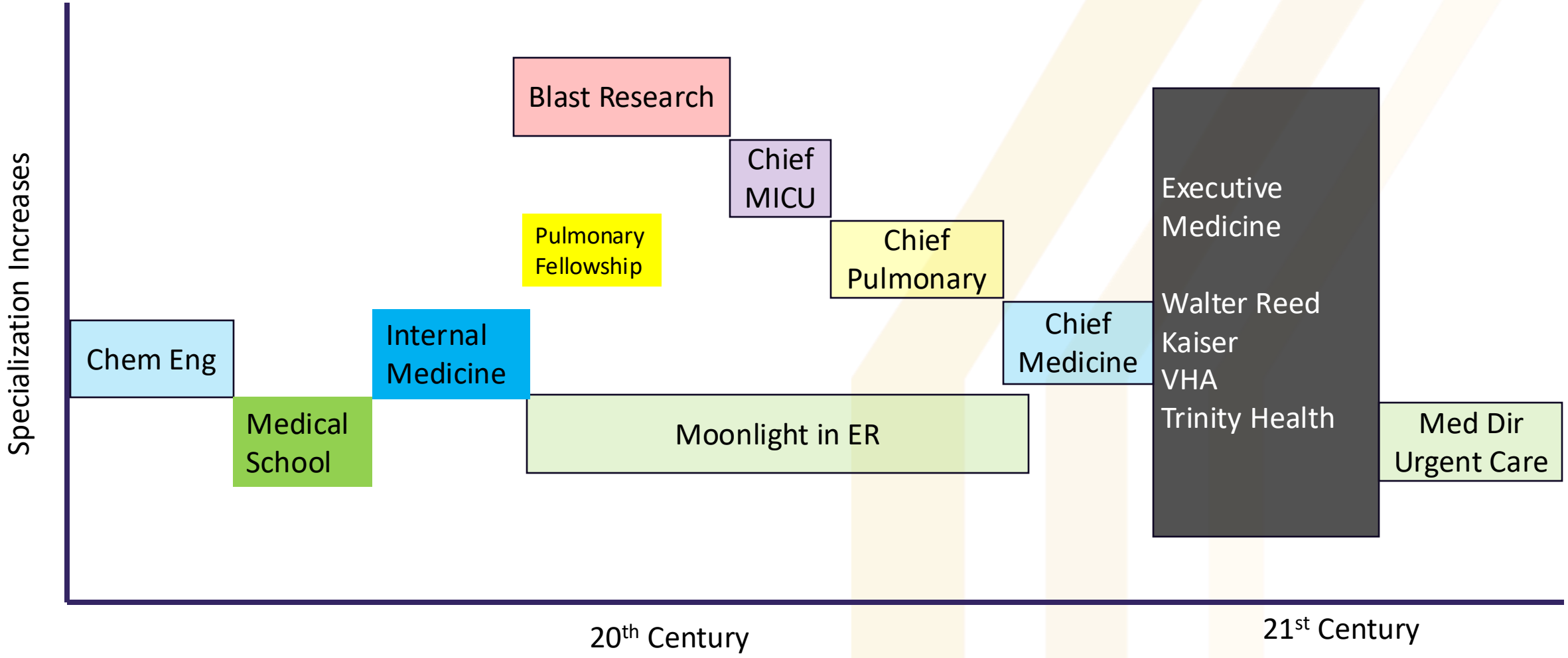
SJ/C Urgent Care Centers

Financial Disclosure: None

The Arc of a Career--Specialization and De-differentiation



The Arc of a Career--Specialization and De-differentiation



Pulmonary Perils and Pearls

DOT Respiratory

Vital Signs and Physical Examination

Upper Respiratory Illness

Community Acquired Pneumonia

Chronic Obstructive Lung Diseases

Steroid Stewardship

Pulmonary Emergencies

DOT Respiratory Standards

- PFTs in smokers over age 35
- SpO2 or ABG for FEV1<65% pred; FVC < 60% pred; FEV1/FVC < 65%
- SpO2 < 92% get ABG
- Do Not Certify PaO2 < 65 below < 5000 ft or < 60 above 5000 ft
- Do Not Certify PaCO2 > 45
- Obstructive Sleep Apnea--EDS
  - Max one year Cert
  - Wait 1 month after CPAP and 3 months after OSA surgery

Vital Signs are Vital

- Temperature
- Pulse—tachycardia
- Pressure, blood—Hypotension
    - Manual pulsus paradoxus (< 10mm)
- Respiratory rate—count for a full minute; Adult ≤ 20
    - Bradypnea—opiates and respiratory fatigue
- "Fifth" vital sign: Pulse oximetry, LMP, Pain Score

Know what is normal for children

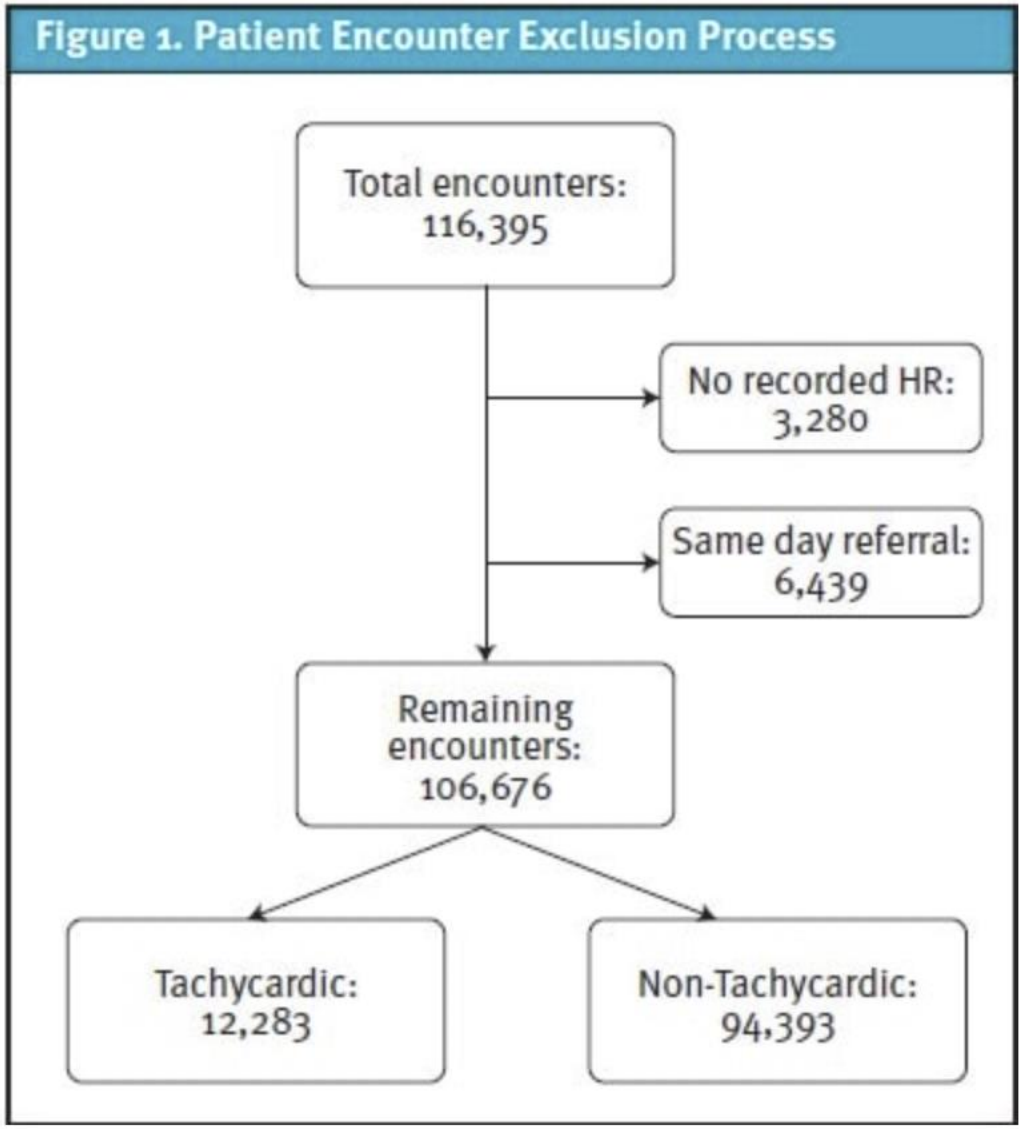
Heart Rate (beats/min)			Respiratory Rate (breaths/min)	
Age	**Awake**	**Asleep**	**Age**	**Normal**
Neonate (<28 d)	100-205	90-160	Infant (<1 y)	30-53
Infant (1-12 mos)	100-190			
Toddler (1-2 y)	98-140	80-120	Toddler (1-2 y)	22-37
Preschool (3-5 y)	80-120	65-100	Preschool (3-5 y)	20-28
School-age (6-11 y)	75-118	58-90	School-age (6-11 y)	18-25
Adolescent (12-15 y)	60-100	50-90	Adolescent (12-15 y)	12-20

Reference: PALS Guidelines, 2015

JUCM, June 2024, Nunes, et al

Return Visits and Hospitalization Rates of Adult Patients Discharged with Tachycardia After an Urgent Care Visit

- Pulse >= 100 at discharge (or initial if not repeated)
- 1.46 RR return to ED or UC
- 2.86 RR hospital admission (0.91% vs 0.38%)



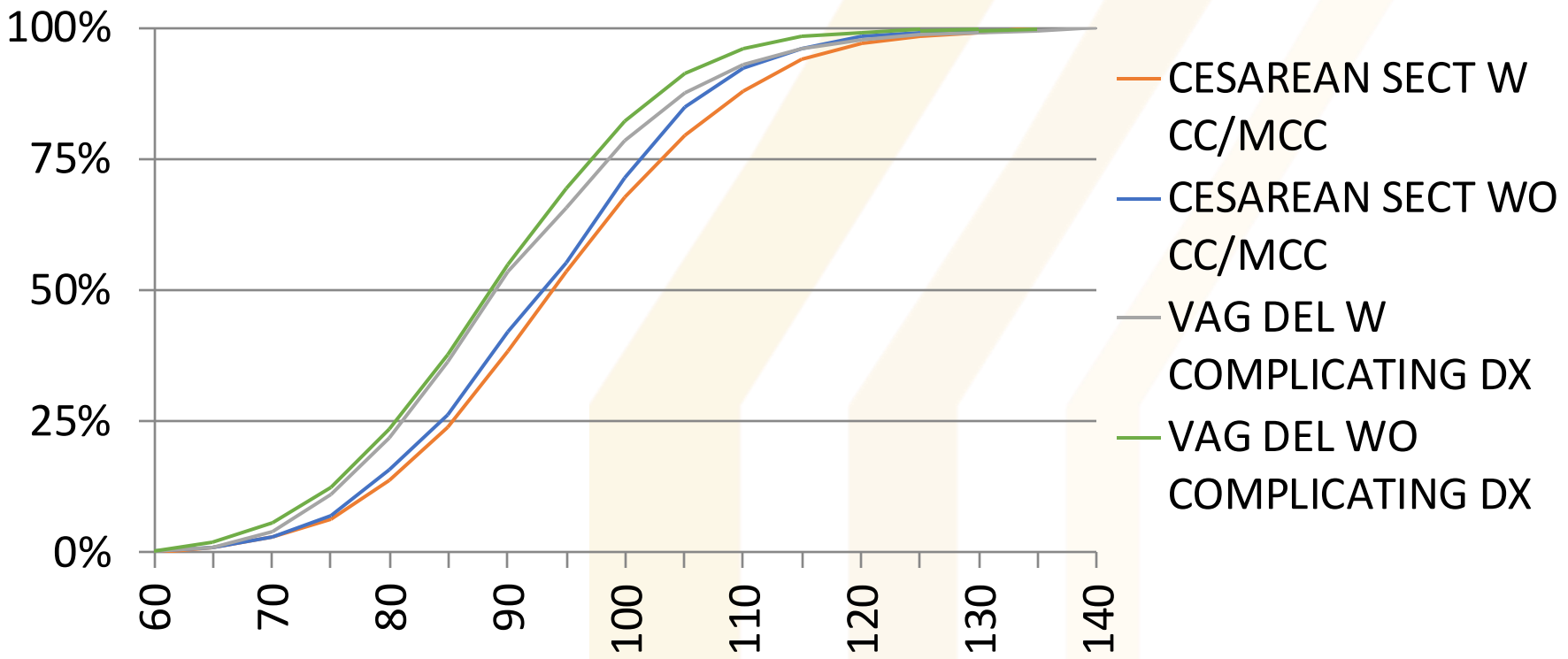
A story from a previous life

- 10,000 deliveries per year
- Post partum complications and near misses
- Almost always prefaced by an unaddressed tachycardia
- “Everybody has a rapid pulse after having a baby”

Significant tachycardia is not normal after delivery

Unpublished data from Holy Cross Hospital, Silver Spring, MD

8672 deliveries—only 4% of uncomplicated vaginal deliveries p>=110



You Must Explain the Tachycardia (Recheck)

- Pain and/or Anxiety
- Infection or inflammation with or without fever
    - Adult < 10 bpm/^{o}C
- Arrhythmia
- Dehydration—volume loss, orthostatic vitals
- Substance use or withdrawal
- Rare endocrine—T3 or Pheo

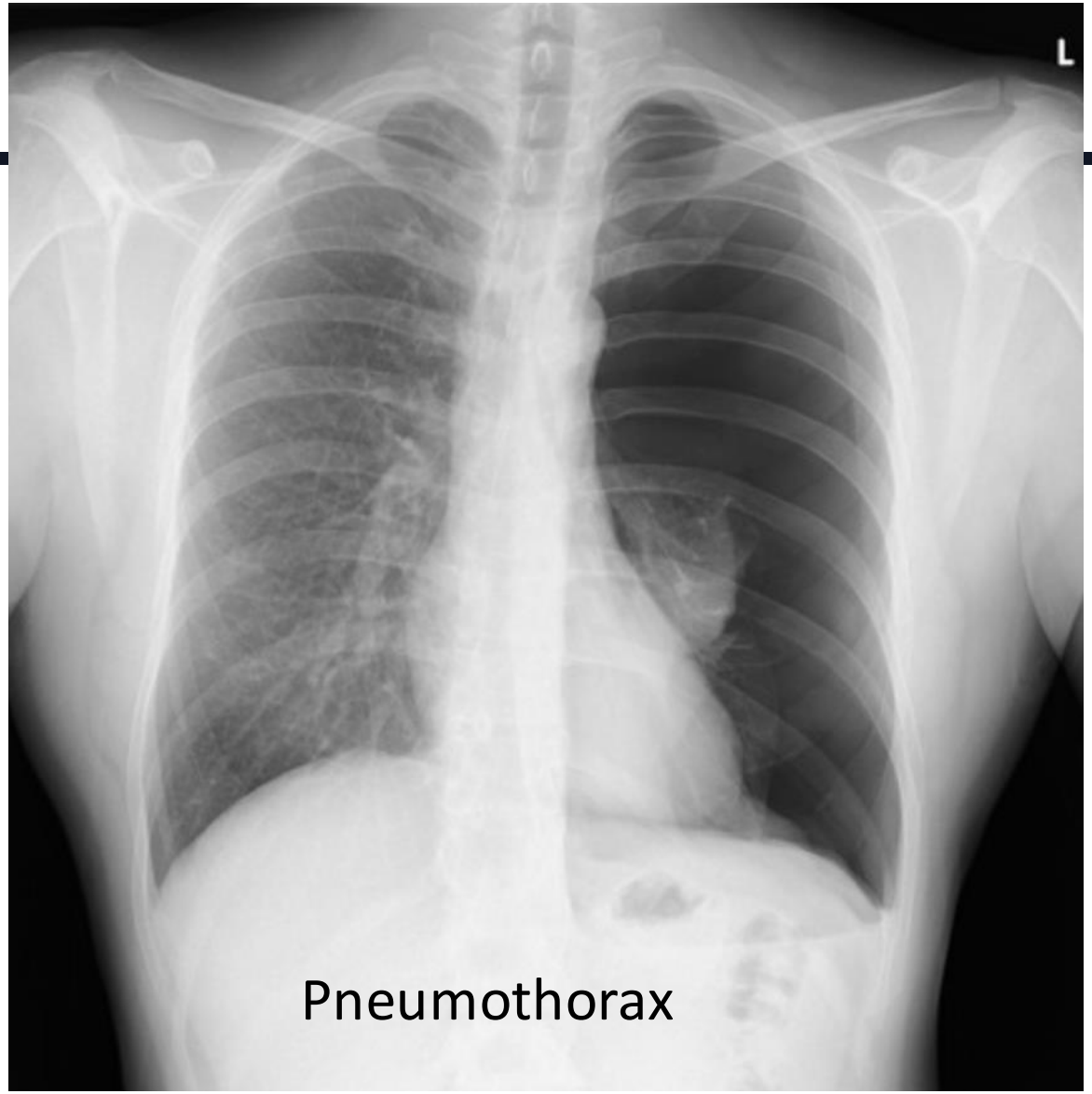
Respiratory History

- Dyspnea “quote the patient”
- Pain, cough, fever
- PMHx & Meds
- FHx—asthma, TB

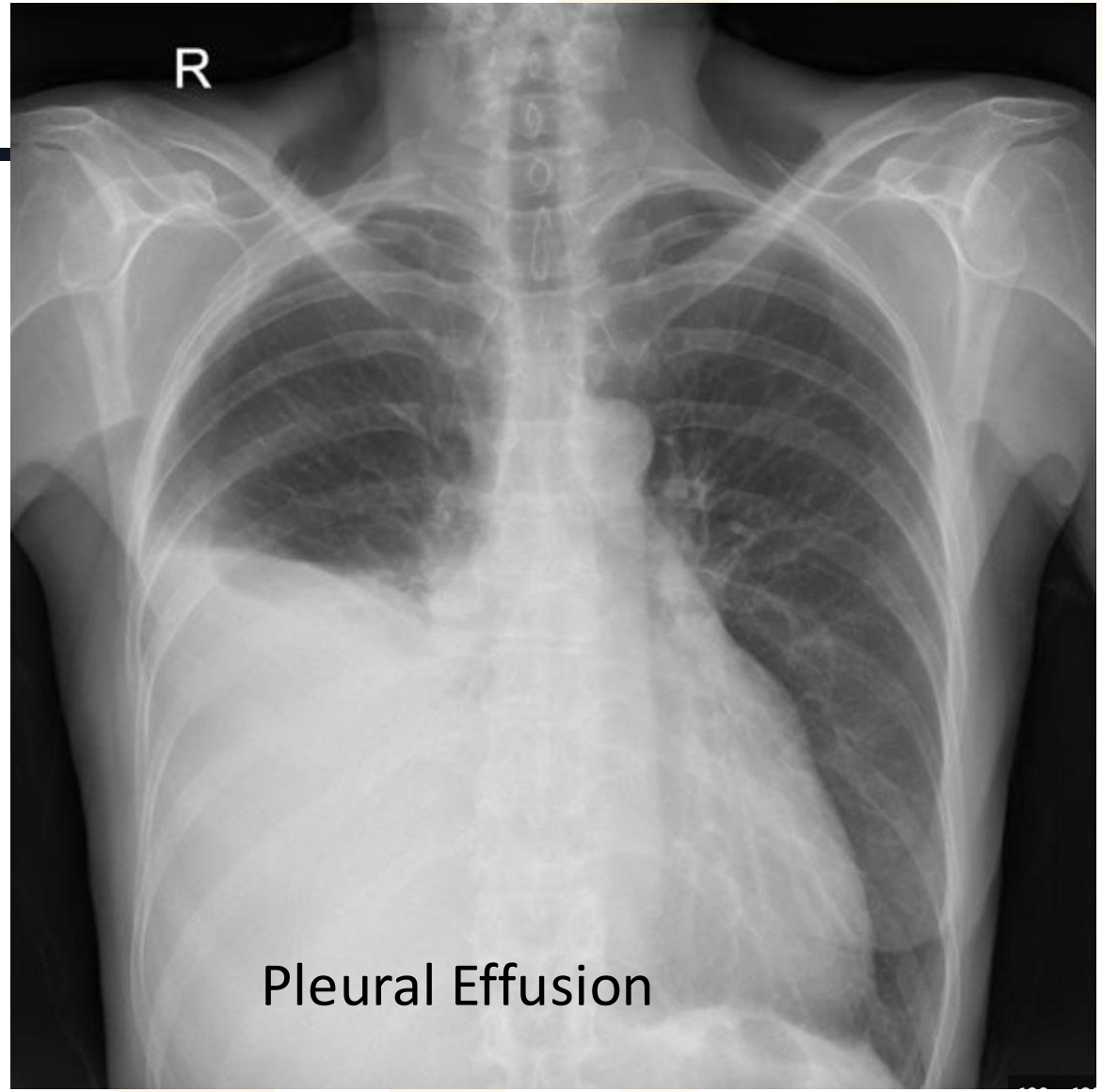
- Exposure history
  - smoking, occupational, environmental, avocational, meds

Pulmonary Examination

- Observation—effort and retractions, speech, stridor
- Upper Airway—patency, exudates
- Auscultation—diaphragm makes skin contact
  - "Breath sounds normal"--WNL
  - Rales, rhonchi, wheezes, asymmetry, silence
- Useless—percussion, egophony, pectoriloquy



Pneumothorax



Pleural Effusion

FURI (Fever and Upper Respiratory Illness) in Urgent Care

- Protect yourself, staff and patients
- Triage who needs to go to the hospital
- Who gets tested for virus?
- Who gets treated?
- Discharge planning

New York Times 12-22-22 “The Tripledemic"

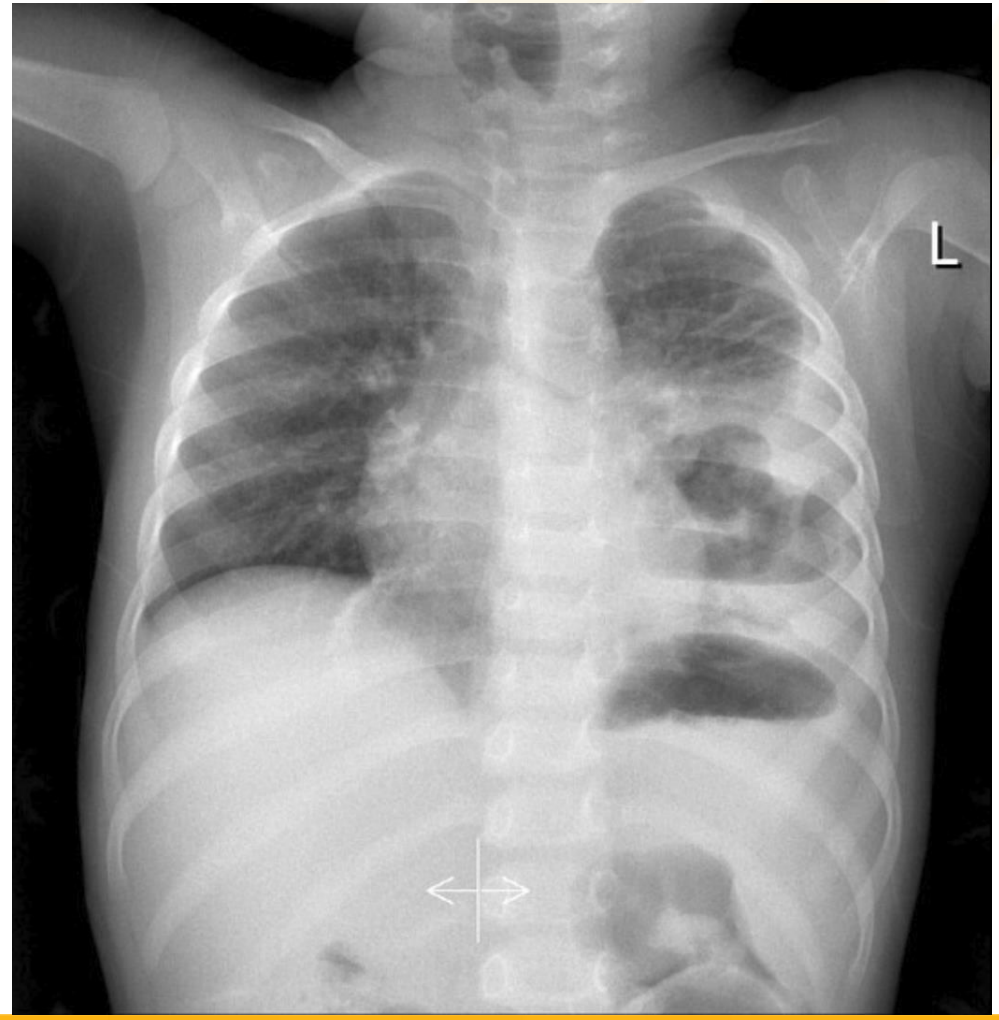
Symptoms	Cold	Flu	Covid-19	R.S.V.
Cough	●●●	●●●	●●●	●●●
Difficulty breathing	●	●	●●●	●●
Fatigue	●●	●●●	●●●	●
Fever	●	●●●	●●	●●
Headaches	●●	●●●	●●●	●●
Muscle pain or body aches	●●	●●●	●●	●
New loss of taste or smell*	●	●	●●	●
Runny or stuffy nose	●●●	●●	●●	●●●
Sneezing	●●●	●●	●●	●●
Sore throat	●●●	●●	●●●	●
Vomiting or diarrhea	●	●●	●●	●
Wheezing	●	●	●	●●●

Who needs to go to the hospital for evaluation and/or treatment?

- Pneumonia Severity Index or CURB/CRB-65
- Altered mental status, major co-morbidities, Age
- Vital Signs Remain Vital
  - RR $\geq$ 30
  - Pulse $\geq$ 125
  - Temp $\leq$ 35° C or $\geq$ 40° C
  - SpO_2 < 92%
  - Systolic BP $\leq$ 90

Scary Chest Radiographs in FURI/CAP

- Multi-Lobar Infiltrates
- Cavities or Air-fluid Levels
- Large Pleural Effusions
- Flu positive with infiltrates



Test for Influenza A/B and COVID if positive would influence treatment or patient instructions

- Testing for RSV not indicated
- COVID/flu positive at home—no need to repeat
- COVID/flu negative at home—do not influence testing
- Vaccination history not helpful
- Personal risk
  - Older or with co-morbidity
- Risk for contacts—home or work

- Patient demand

Who gets treated for URI/COVID/Flu?

- Antibiotic stewardship
- Symptomatic relief for all etiologies (Macro/SmartPhrase)
  - OTC anti-pyretics, anti-tussives, analgesics
  - Nasal decongestants (2 days)
  - Nasal steroids and antihistamines
  - Oral hydration and saline wash/gargle
  - MDI Bronchodilators

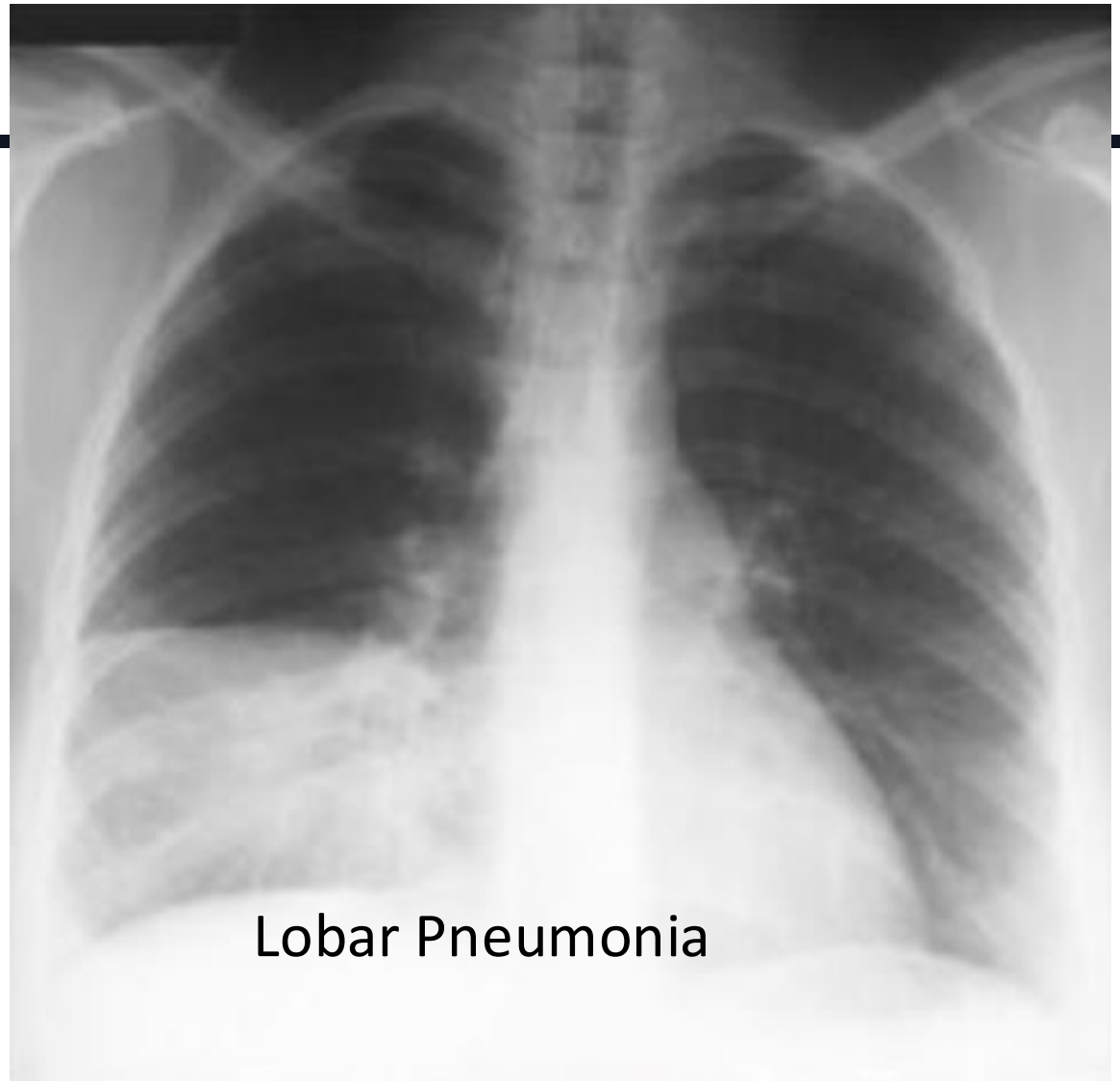
- Flu positive and Sxs < 48 hours—offer Oseltamivir BID for 5 days
  - Flu-sick with Flu+ close contact

- COVID positive—offer Paxlovid for age > 65 or high risk
  - Consider renal function and medication interactions
  - Document shared medical-decision-making

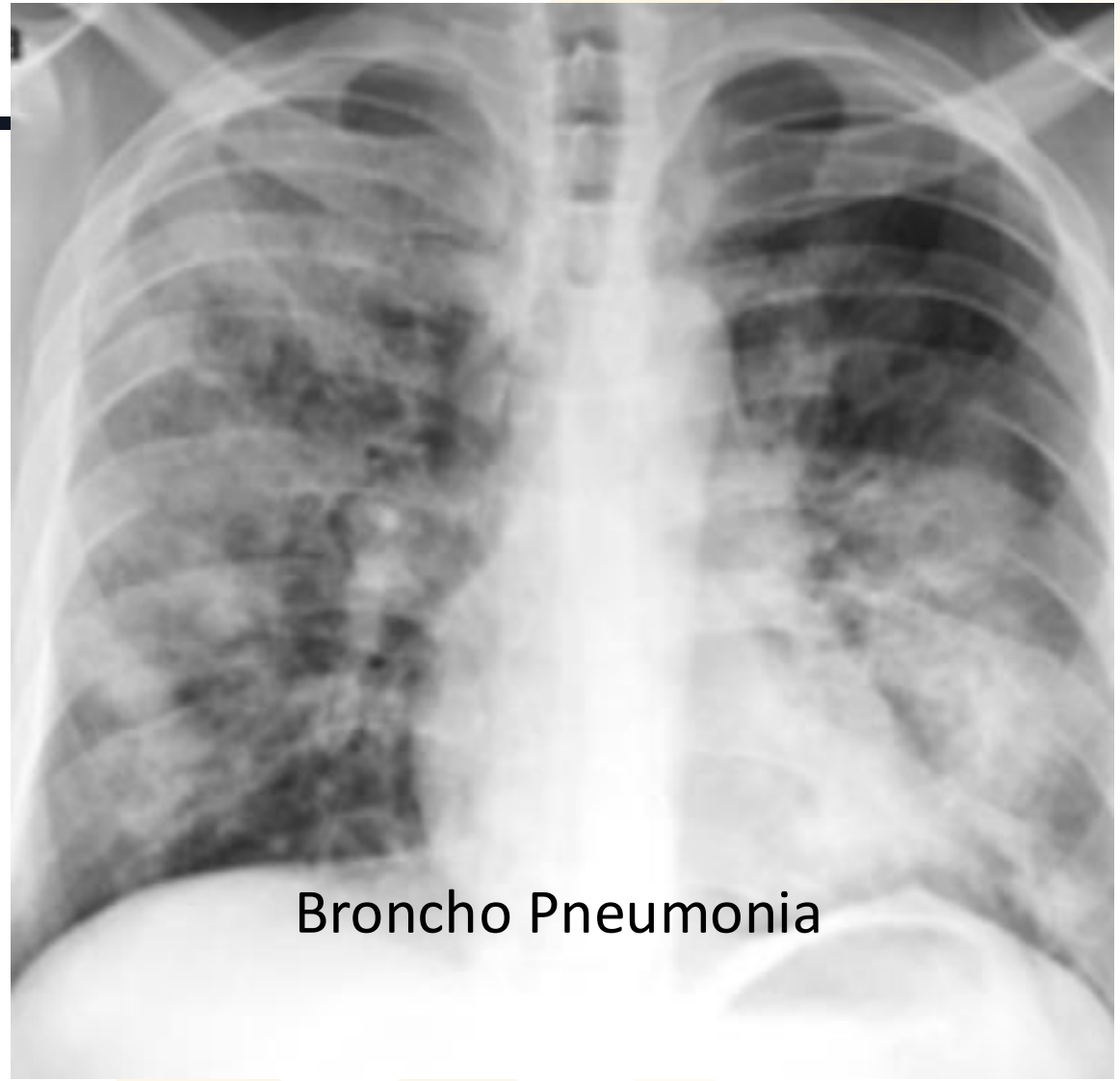
Discharge Planning

- Advice similar for any viral FURI
  - "Isolate" at home until afebrile with decreasing symptoms
  - OTC “bundle”
  - Go to Emergency Room for significant worsening
  - Coordinate with established PCP
  - Reinforce vaccination and boosters

- At risk for COVID complications and POCT COVID/Flu negative
  - Home COVID test x 2 days contact PCP or UC if positive
  - Consider purchase of pulse oximeter (<$30 on Amazon)



Lobar Pneumonia



Broncho Pneumonia

Outpatient Antibiotics for Adult Community Acquired Pneumonia

- Uncomplicated
  - Amoxicillin TID for 5-7 day **or** doxycycline BID for 5-7 days
- Comorbidities
  - Amox/Clav BID **and** doxycycline BID or macrolide
  - Cefuroxime BID **and** doxycycline BID or macrolide
  - Respiratory fluoroquinalone

Outpatient Antibiotics for Pediatric Community Acquired Pneumonia

- Uncomplicated
  - Amoxicillin TID for 5-10 days
  - **or** azithromycin for 5 days
- Comorbidities or incomplete immunizations
  - Amox/Clav **and** macrolide

Chronic Obstructive Pulmonary Disease

- Chronic Bronchitis—blue bloater
- Emphysema—pink puffer
    - Co-morbidities—CHF, PE, Pneumonia, Barotrauma
- Asthma
    - Bronchodilators—adrenergic, anticholinergic
    - Repeat auscultation and vital signs before discharge
    - Demonstrate personal MDI use
    - Anti-inflammatory

Why do we give patients steroids in urgent care?

- To reduce inflammation so that patients feel better faster
- Antibiotic stewardship monitoring
- Patient demand..."it's the only thing that makes me feel better".

Side Effects of Cortico-Steroids

- Immunosuppression
- Osteoporosis
- Cataracts and glaucoma
- Emotional and sleep disturbance
- Obesity and fat redistribution
- Skin thinning and stria
- Suppression of HPA axis

JUCM Sep 2025, Hansen, et al

Analysis of Short Course Systemic Glucocorticoid Prescribing in Urgent and Convenient Care Clinics

OK, MO & AR

Age Group	Diagnosis	SSCG Use (%)
3 months - 1 year	Cough	16.7%
	Acute URI	6.8%
	Wheezing	46.7%
	General Symptoms and Signs	6.4%
	AOM	2.1%
	Rash	17.1%
1 – 12 years	Acute Pharyngitis	4.0%
	Croup	90.9%
	Acute URI	12.2%
	Asthma	70.4%
	Wheezing	64.0%
	Cough	17.1%
13-17 years	Acute Pharyngitis	8.4%
	Acute sinusitis	29.7%
	Asthma	69.3%
	Acute URI	16.2%
	Cough	19.5%
	Rash	48.2%
18 – 64 years	Acute Pharyngitis	17.5%
	Acute Sinusitis	38.4%
	Bronchitis and Other Acute LRI	60.6%
	Acute URI	30.0%
	Unspecified Sinusitis	46.0%
	Cough	33.1%
≥65 years	Acute Sinusitis	31.1%
	Bronchitis and Other Acute LRI	48.0%
	Acute Pharyngitis	18.0%
	Acute URI	27.9%
	Cough	28.2%
	Unspecified Sinusitis	40.3%

Cortico-Steroid (CS) Stewardship

- Oral Corticosteroid Stewardship Statement, November 2018, Allergy & Asthma Network
  - Dr. Bernie Short—Past President SERUCA, UCA Presentations 2024 and 2025
- Asthmatics—85% OCS annually and 65% 2 or more per year
- Complications are delayed requiring population studies
  - 2x risk fracture; 2-3x VTE, 2-5x sepsis
- Medico-legal risk--Dermatology, primary care, neurology
    - Avascular necrosis, psychiatric, vision

Corticosteroids and Pulmonary

- Do not give systemic corticosteroids for
  - allergies, pharyngitis, URI, bronchiolitis/bronchitis, COVID or flu
- Manage symptoms with OTC, fluids, saline wash and gargle, bronchodilators
- COPD exacerbation 40 mg Prednisone/day in AM 5 days
- Short course for asthmatic flare and switch to inhaled steroids
- 500mg Prednisone lifetime may increase morbidity
- Potency 1 : 5 : 25 cortisone : prednisone : dexamethasone

Pulmonary Emergencies

- Parenchymal failure
  - Resistant hypoxemia
- Air can't get in (or out)
  - Dyspnea and stridor
- Blood can't get through
  - Hypotension, hypoxia, dyspnea

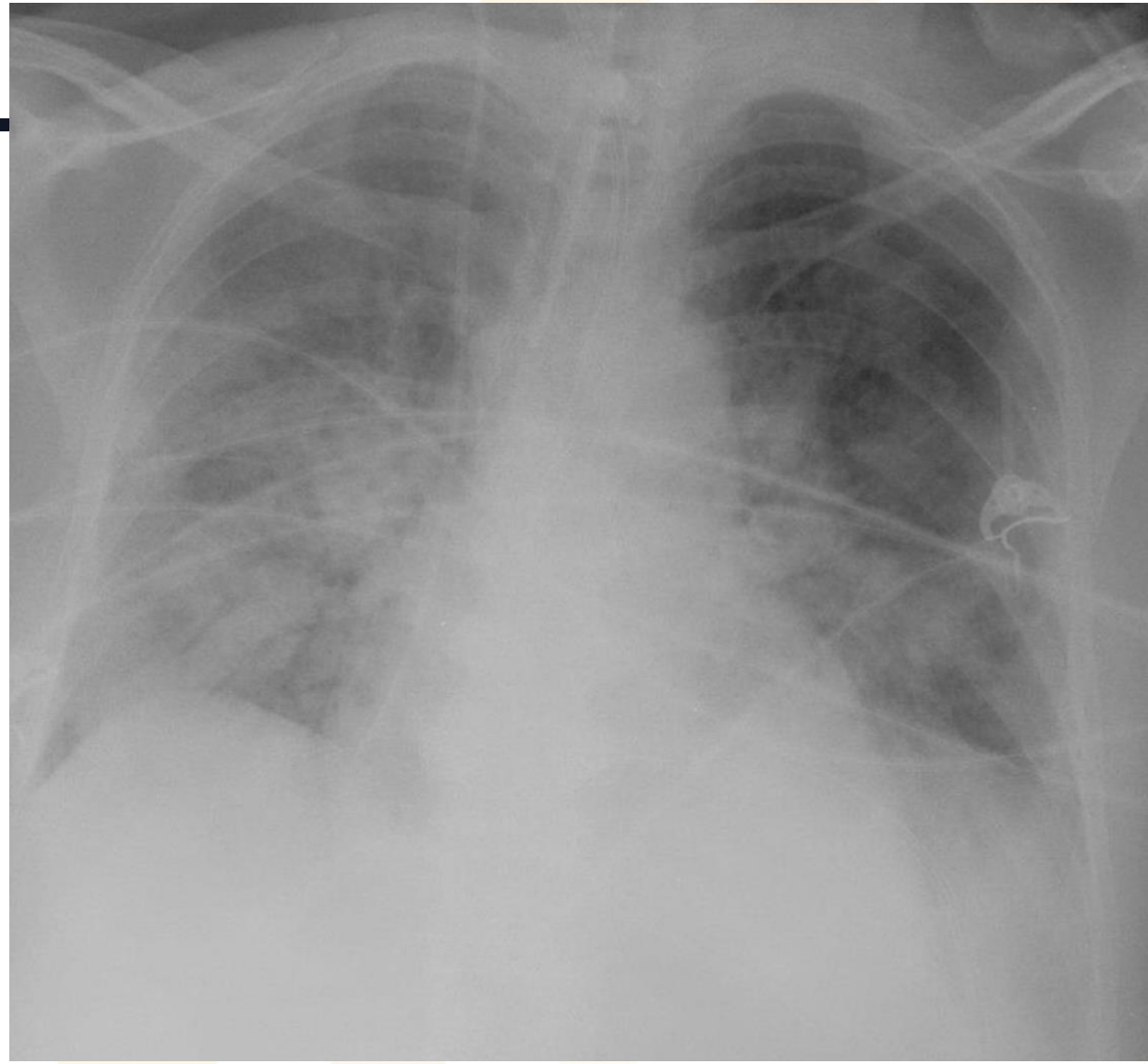
Parenchymal failure

Pneumonia

Inhalation injury

Hypersensitivity reaction

ARDS



Air can’t get in or out

Upper airway obstruction

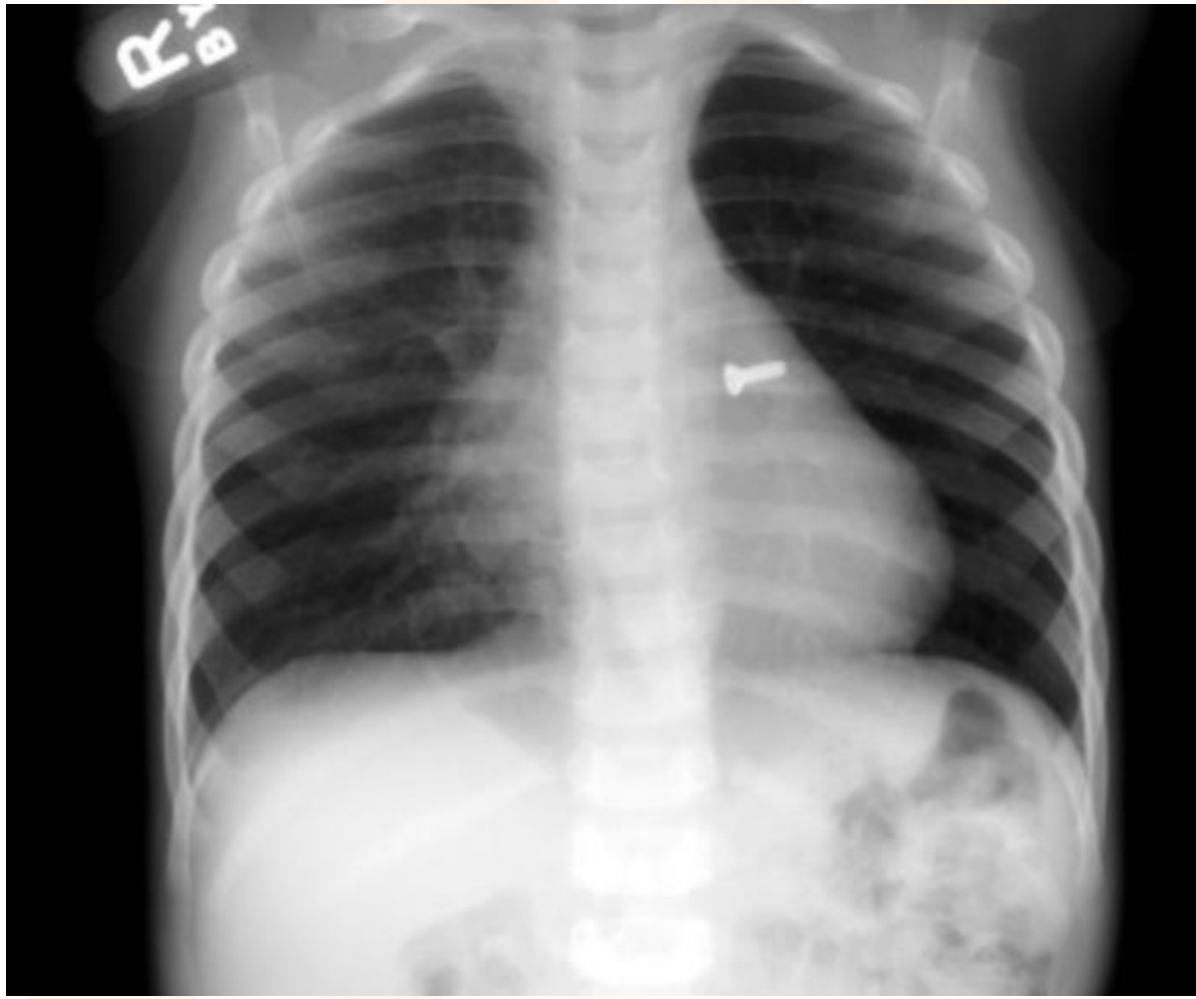
Epiglottitis, abscess, diphtheria

Foreign body aspiration

Trauma—larynx or trachea

Laryngospasm

Bronchospasm



Caption

Blood can't get through

Acute Left Heart Failure

Tension hydro/pneumo thorax

Superior vena caval obstruction

Acute right heart failure

Pulmonary embolus

- Stasis of flow—Immobility
- Endothelial injury—Trauma
- Hypercoagulable—Malignancy, OCPs

Urgent Care Pulmonary Take Homes

- Vital Signs are Vital--Tachypnea and Tachycardia
- Document specifics of auscultation
- Have a non-prescription plan for URIs
- Use systemic corticosteroids sparingly
- Triage respiratory distress quickly and send by EMS

I Need Your Feedback

Prefer paper?

On the form in front of you, please score me and the content I shared with you today.

AFTER THE CONVENTION

You may claim CME here www.urgentcareassociation.org/learning-center/cme/